

**PROPOSED RULE 410 ODORS FROM TRANSFER STATIONS AND
MATERIAL RECOVERY FACILITIES**

(a) Purpose

The purpose of this rule is to establish odor management practices and requirements to reduce odors from municipal solid waste transfer stations and material recovery facilities.

(b) Applicability

This rule applies to new and existing transfer stations and material recovery facilities with a permitted throughput greater than 100 tons per day. This rule does not apply to:

- (1) Direct transfer facilities, as defined in the California Code of Regulations, Title 14, Division 7, Chapter 3, Article 6.0, Section 17402(a);
- (2) Facilities handling only nonhazardous ash, as defined in California Code of Regulations, Title 14, Division 7, Chapter 3, Article 5.8; or
- (3) Facilities handling only construction and demolition and inert debris (CDI) materials, as defined in California Code of Regulations, Title 14, Division 7, Chapter 3, Article 5.9.

(c) Definitions

- (1) COMMUNITY COORDINATOR means the person at a facility responsible for responding to odor complaints from the surrounding community.
- (2) ENFORCEMENT AGENCY (EA) or LOCAL ENFORCEMENT AGENCY (LEA) means a solid waste management enforcement agency that performs permitting, inspection and enforcement duties for solid waste handling facilities in the District. An LEA is responsible for carrying out solid waste enforcement in its jurisdiction as defined in 14 CCR Division 7, 27 CCR Division 2, Subdivision 1 (§20005 et seq.).
- (3) EXISTING FACILITY, for the purpose of this rule means a transfer station or material recovery facility that began operation prior to *(date of adoption)*.
- (4) GREENWASTE is any organic waste material generated from gardening, agricultural, or landscaping activities including, but not limited to, leaves, grass clippings, tree and shrub trimmings and plant remains.

- (5) MATERIAL RECOVERY FACILITY (MRF) is a solid waste facility where solid waste or recyclable materials are sorted or separated, by hand or by use of machinery, into recyclable materials and residual waste, for the purposes of recycling or composting, and offsite disposal of residual waste.
- (6) MODIFIED FACILITY for the purpose of this rule means a new or existing transfer station or material recovery facility that increases its permitted throughput after (*date of adoption*), such that either:
 - (A) the incremental increase in permitted throughput is more than 1,000 tons per day, or;
 - (B) the cumulative permitted throughput after modification, including the previously existing permitted throughput prior to modification, and including the increase in permitted throughput due to the modification, is more than 3,000 tons per day.
- (7) MUNICIPAL SOLID WASTE (MSW) includes waste generated in households, commercial establishments, institutions, and businesses. MSW includes used paper, discarded cans and bottles, foodwaste, yard trimmings, and other items.
- (8) NEW FACILITY for the purpose of this rule means a transfer station or MRF that begins operation on and after (*date of adoption*).
- (9) ODOR GENERATING SOURCE means any area within the property boundary of a transfer station or MRF where solid waste, including municipal solid waste, greenwaste and recyclable materials are stored, sorted or transferred. Odor generating source includes buildings, covered areas, open areas, trucks, roadways, machinery used to move or sort solid waste, sumps and drains.
- (10) ODOR MANAGEMENT PLAN (OMP) means a written plan that describes odor control methods or techniques at a transfer station or MRF subject to this rule.
- (11) OWNER OR OPERATOR, for the purpose of this rule, means any person who owns, leases, operates, controls or supervises activities at a facility subject to this rule.
- (12) PERMITTED THROUGHPUT means the maximum daily amount of municipal solid waste, greenwaste and other types of waste allowed in a solid waste operating permit issued by a Local Enforcement Agency (LEA) to a facility subject to this rule.

- (13) RECYCLABLE MATERIALS means materials that are capable of being recycled and that may be segregated from other waste material for collection and recycling, rather than collection and disposal.
 - (14) SENSITIVE RECEPTOR includes public and private schools (kindergarten through grade 12), licensed daycare centers, hospitals, and convalescent homes.
 - (15) TIPPING means unloading of solid waste, recyclable material, greenwaste and other types of waste from a truck or trailer for the purpose of transfer or sorting operations.
 - (16) TIPPING FLOOR means the area inside of a facility where tipping takes place. The tipping floor does not include the area in which only construction and demolition debris is delivered, or the area in which only greenwaste is delivered, if these materials are delivered in a separate location from solid waste and recyclable waste.
 - (17) TRANSFER STATION is a facility that receives, handles, separates, or otherwise processes solid waste; and/or transfers solid waste directly from one container to another or from one vehicle to another for transport; and/or stores solid waste for final disposal.
 - (18) TRANSFER TRUCK or TRANSFER TRAILER is a vehicle or trailer that is loaded at a transfer station or processing facility and transports refuse, including MSW and greenwaste to a landfill or other final disposal destination.
 - (19) TRANSFER TUNNEL means the tunnel or channel where transfer trucks or trailers travel and are top-loaded, and includes the entrance and the exit.
- (d) Requirements for New and Modified Sources
- (1) Prior to commencing operations or increasing throughput, the owner or operator of a new facility with permitted throughput greater than 1,000 tons per day, or a modified facility shall either:
 - (A) conduct tipping, sorting and transfer operations within the confines of an enclosure that meets the following requirements:
 - (i) the ventilation system is designed and operated to maintain the inward face velocity of air through each opening in which air can enter the enclosure at a minimum of 100 feet per minute under no-wind conditions; and

- (ii) the area of all openings in the enclosure through which air can enter the enclosure shall not exceed 2% of the surface area of the enclosure's four walls, floor and horizontal projection of the roof; and
 - (iii) enclosure openings shall not be opened for access and maintenance for more than 30 minutes during any 8 hour shift, except for the enclosure openings which are routinely used for ingress and egress of refuse vehicles and transfer trucks or trailers; or
 - (B) demonstrate that the facility is not located within 1000 feet of any area zoned for residential or mixed use, measured from the side of the odor generating source located nearest to the area zoned for residential or mixed use to the closest property line of the receptor.
- (e) Odor Management Plan Compliance Dates
 - (1) The owner or operator of a facility subject to this rule shall comply with the requirements of either:
 - (A) an approved Rule 410 Odor Management Plan (OMP) submitted pursuant to subdivision (f); or
 - (B) an approved Alternative Odor Management Plan (AOMP), submitted pursuant to subdivision (g).
 - (2) Compliance Dates

The owner or operator of a facilities subject to this rule shall comply with paragraph (e)(1):

 - (A) On or before January 1, 2008 for existing facilities; or
 - (B) Before increasing permitted throughput, for any facility for which permitted throughput is increased after January 1, 2008; or
 - (C) Before commencing operations or by January 1, 2008, whichever is later, for a new facility.
- (f) Rule 410 Odor Management Plan (OMP)
 - (1) Submittal of Rule 410 OMP

The owner or operator of a facility complying with subparagraph (e)(1)(A) shall submit a Rule 410 OMP to the Executive Officer containing all information required in subparagraph (f)(2) on or before:

 - (A) *(180 days after date of adoption)* for existing facilities; or

- (B) July 1, 2007 for new facilities that begin operations prior to January 1, 2008; or
 - (C) 180 days prior to commencing operations, for new facilities that begin operations after January 1, 2008; or
 - (D) 180 days prior to increasing permitted throughput for any facility for which permitted throughput is increased after January 1, 2008.
- (2) Information Required in Rule 410 OMP
- The owner or operator of a facility complying with subparagraph (e)(1)(A) shall submit a Rule 410 OMP to the Executive Officer containing the following information pursuant to Appendix A, Rule 410 Odor Management Plan:
- (A) all information under “Required Elements”, if permitted throughput is greater than 100 tons per day and less than or equal to 250 tons per day; or
 - (B) all information under “Required Elements” and the chosen Level 1 Control Strategies, if permitted throughput is greater than 250 tons per day, and less than or equal to 1000 tons per day; or
 - (C) all information under “Required Elements” and the chosen Level 2 Control Strategies, if permitted throughput is greater than 1000 tons per day.
- (3) Updates to Rule 410 OMP
- (A) An approved Rule 410 OMP shall remain in effect until an updated OMP is approved by the Executive Officer.
 - (B) At least 180 days prior to making any changes to a Level 1 or Level 2 Control Strategy, the owner or operator of a facility complying with subparagraph (e)(1)(A) shall update the Rule 410 OMP with all information required under paragraph (f)(2) and submit it to the Executive Officer.
 - (C) At least 180 days prior to increasing permitted throughput, the owner or operator of a facility that increases the permitted throughput from less than 250 tons per day to greater than or equal to 250 tons per day shall update the Rule 410 OMP with all information required under (f)(2)(B) and submit it to the Executive Officer.
 - (D) At least 180 days prior to increasing permitted throughput, the owner or operator of a facility that increases the permitted

throughput from less than 1000 tons per day to greater than or equal to 1000 tons per day shall either:

- (i) update and submit the Rule 410 OMP with all information required under (f)(2)(C); or
 - (ii) submit a letter to the Executive Officer explaining that the existing OMP addresses all information required under (f)(2)(C).
- (E) Within 60 days after making an administrative change to any section under “Required Elements”, the owner or operator of a facility subject to this rule shall revise and resubmit a Rule 410 OMP.
- (F) Within 60 days after notification from the Executive Officer that a previously approved Rule 410 OMP does not adequately address odors from any odor generating source at a facility, the owner or operator shall revise and resubmit a Rule 410 OMP.
- (4) Approval and Disapproval of a Rule 410 OMP
 - (A) Rule 410 OMP Approval Criteria

A Rule 410 OMP shall include all information required under subparagraph (f)(2).
 - (B) The Executive Officer will notify the owner or operator in writing whether the Rule 410 OMP is approved or disapproved. If the Rule 410 OMP is disapproved, the owner or operator shall resubmit the Rule 410 OMP within 60 days after notification of disapproval. The resubmitted Rule 410 OMP shall include any information necessary to address deficiencies identified in the disapproval letter.
 - (C) Within 180 days after submittal of a Rule 410 OMP to the District, the Executive Officer will approve or disapprove the Rule 410 OMP. The Executive Officer shall approve the Rule 410 OMP if it is complete and meets the content requirements under paragraph (f)(2).
- (5) Availability of Rule 410 Requirements

Requirements for an approved Rule 410 OMP shall be:

 - (A) posted so as to be clearly visible to operations and inspection personnel, or as otherwise approved by the Executive Officer; and
 - (B) made available to SCAQMD personnel upon request.

- (6) The owner or operator of a facility subject to this rule shall conduct operations in a manner designated in an approved Rule 410 OMP and shall comply with all conditions in an approved Rule 410 OMP.
- (g) Alternative Odor Management Plan (AOMP)
 - (1) The owner or operator of a facility that elects to comply with the requirements of subparagraph (e)(1)(B) shall submit to the Executive Officer:
 - (A) an AOMP that was approved by the Local Enforcement Agency (LEA) for the facility; and
 - (B) written documentation from the LEA of the approval date of the AOMP; and
 - (C) a copy of the enforceable document where the AOMP is incorporated, such as a Solid Waste Facility Operating Permit, Transfer/Processing Report (T/PR), or Report of Facility Information (RFI), or other enforceable document issued by the LEA.
 - (2) An AOMP approved by the LEA and submitted to the Executive Officer pursuant to subparagraph (e)(1)(B) shall include the following information:
 - (A) the odor control technique or strategy used on the tipping floor; and
 - (B) the odor control technique or strategy used in the waste transfer tunnel; and
 - (C) the odor control technique or strategy used in the material recovery facility (MRF); and
 - (D) identification of housekeeping activities for the tipping floor, transfer tunnel and facility perimeter; and
 - (E) community response, including installation of a contact sign, identification of a Community Coordinator, and protocol for responding to odor complaints from the surrounding community.
 - (3) The conditions of an approved AOMP shall be enforceable by the Executive Officer.
 - (4) Availability of AOMP Requirements
Requirements for an approved AOMP shall be:

- (A) posted so as to be clearly visible to operations and inspection personnel, or as otherwise approved by the Executive Officer; and
 - (B) made available to SCAQMD personnel upon request.
- (h) Exemptions
 - (1) The following operations are not subject to this rule:
 - (A) composting operations subject to Rule 1133; and
 - (B) co-composting operations subject to Rule 1133.2.
 - (2) Facilities with an Odor Impact Minimization Plan (OIMP) approved by the Local Enforcement Agency (LEA) or the California Integrated Waste Management Board (CIWMB) are not required to submit an Odor Management Plan (OMP) pursuant to subdivision (e), provided the OIMP meets the requirements of a Rule 410 OMP.
- (i) Rule 410 OMP and Alternative OMP Plan Fees

A Rule 410 OMP submitted, resubmitted or updated under subdivision (f) shall constitute a plan for the purpose of fees assessed under Rule 306 – Plan Fees. An approved Alternative OMP submitted pursuant to subdivision (g) shall constitute a plan for the purpose of fees assessed under Rule 306 – Plan Fees.

APPENDIX A

RULE 410 ODOR MANAGEMENT PLAN (OMP)

Required Elements

Required Elements are required for all submitted Rule 410 Odor Management Plans (OMP) submitted. In order to be approved, an Odor Management Plan (OMP) must contain all the following “Required Elements”:

1. Facility Information

Provide the following facility information:

- a. Facility name
- b. Location address
- c. SCAQMD ID number, if applicable
- d. Mailing address
- e. Contact person at facility for odor issues
- f. Phone number of contact person

2. Permitted Throughput

Provide total facility permitted throughput, in tons per day (TPD); and actual or estimated throughput for:

- a. Agricultural
- b. Construction/Demolition
- c. Green Materials
- d. Industrial
- e. Inert
- f. Manure
- g. Metals
- h. Mixed Municipal
- i. Tires
- j. Wood Waste

3. Greenwaste

Facilities processing more than 250 TPD of greenwaste are required to conduct all greenwaste tipping, sorting and handling activities within the confines of a physical barrier. The barrier must either:

- a. consist of material capable of blocking wind and be at least as tall as the tallest pile of greenwaste stored within; or
- b. be an enclosure with two or more walls with one of the walls located downwind of the prevailing wind.

Identify and describe the greenwaste storage and processing operation at the facility.

4. Buffer Zone for New Facilities

Residences or sensitive receptors (i.e. schools, licensed daycare centers, hospitals, and convalescent homes) located within 1000 feet of facility.

Provide the distance in feet to the nearest residence or sensitive receptor, measured from the side of the odor generating source located nearest to the area zoned for residential or mixed use to the closest property line of the receptor.

5. Recyclable Materials

Except for facilities with no residence or sensitive receptor located within 1000 feet, within 12 hours after recycled containers that contained dairy products or other organic materials are baled for shipment, facilities handling such recycled containers are required to store them as follows:

- a. completely covered with a tarp; or
- b. inside of a partial enclosure, consisting of a roof structure and at least two walls, provided one wall is downwind of the prevailing wind at the facility; or
- c. inside of a complete enclosure, consisting of a roof structure and four walls; or
- d. other method approved by the Executive Officer.

Specify whether facility is a material recovery facility (MRF), and identify the option chosen for storage of recycled containers awaiting shipment.

6. Protocol for Handling Community Complaints

On days in which odor complaints are received by the facility, a facility representative is required to conduct an odor survey of the surrounding community. The survey should be conducted in a complete radius around the facility and should extend as far outward as odors are detected.

Describe the results of the survey, including type and intensity (i.e. weak, moderate strong) of odors at various locations around the facility. Include the time, wind direction and approximate wind speed during the time the survey was conducted. Identify the source if possible (i.e. trucks pre-loaded for following day's transportation to landfill, MRF, greenwaste operation, etc.)

Describe the protocol for handling complaints from the surrounding community, including:

- a. Maximum length of time to respond to complaints
- b. Handling of repeat complaints
- c. Protocol when a complaint is received. For example, an interview conducted with the complainant, any follow-up activities, etc.

List the person responsible for responding to complaints from the surrounding community, including:

- a. Name
- b. Title
- c. Contact phone number

7. Contact Sign

Facilities are required to install a sign indicating a contact person to call for questions or complaints, with a phone number that is accessible 24 hours, 7 days a week. The sign must meet the following requirements, unless otherwise approved in writing by the Executive Officer:

- a. installed within 50 feet of the main entrance to the facility
- b. at least 48 inches wide by 48 inches tall
- c. lettering at least 4 inches tall
- d. text contrasting with the sign background
- e. lower edge of the sign located between 6 and 8 feet above grade.

Provide a photograph or drawing of the contact sign, and a description of its location relative to facility entrance.

8. Paper Log of all Odor Complaints

Facilities are required to maintain a paper log of all odor complaints received, for a minimum of 2 years after receiving the complaint and make the log available to SCAQMD inspection personnel upon request. At a minimum, the odor complaint information shall include:

- a. date of complaint
- b. temperature at time of complaint
- c. type of odor
- d. odor intensity
- e. "normal" or "upset" weather conditions
- f. wind direction and approximate wind speed
- g. name and contact phone number of complainant, if available
- h. description of the possible source of odor that generated the complaint.
- i. description of the results of the odor survey required by section 6.

Provide a sample of the log that is/will be kept for odor complaints.

9. Meteorological Conditions at Facility

Facilities with permitted throughput greater than 1000 tons per day (TPD) are required to install and operate a weather monitoring station, or other means approved by the Executive Officer, to monitor temperature, humidity, wind speed and wind direction. Facilities are required to maintain a log of the weather monitoring station data for a minimum of 2 years and make the log available to SCAQMD inspection personnel upon request.

10. Protocol for Handling Odiferous Loads

Facilities are required to specify a protocol for handling especially odiferous loads that may result in offsite odor complaints if not dealt with immediately. The protocol shall include procedures used at the facility to handle such loads, to reduce odors and to prevent odor complaints.

11. Housekeeping Activities

Facilities are required to sweep the following areas of the facility:

- a. Tipping floor is required to be swept or cleared once each day for days in which tipping occurs. Describe method of sweeping (ex. by hand with a broom, street sweeper, front-end loader with sweeping head, etc.) and describe the use of detergents or products intended to neutralize or mask odors.
- b. Transfer tunnel is required to be swept or cleared once per day, and all loose or spilled trash removed, during each day in which transfer operations occur. Describe method of sweeping and describe the use of detergents or products intended to neutralize or mask odors
- c. All areas inside and outside of facility property (ex. street or other area where refuse trucks wait to tip) in which trash from transfer or material recovery operation accumulates are required to be swept at least once each day facility is open for business. Describe method of sweeping and describe the use of detergents or products intended to neutralize or mask odors.

Facilities are required to maintain a log of sweeping activities for a minimum of 2 years and make the log available to SCAQMD inspection personnel upon request.

12. Covering and Parking of Trucks and Trailers

Facilities that load open-top trucks in a top-loading configuration are required to cover trucks within 15 minutes after loading with a tarp. Facilities that pre-load trucks or trailers for transportation to a landfill or other disposal destination on the following day, or later, are required to

park pre-loaded trucks or trailers in a covered location within 60 minutes after loading. Specify procedure for covering and parking of trucks.

Control Strategies

In order to be approved, an Odor Management Plan (OMP) must identify the selected “Control Strategy” for addressing odors at each of the following odor generation points:

1. Facilities with Permitted Throughput >250 and < or Equal to 1000 TPD

Facilities with permitted throughput greater than 250 TPD and less than or equal to 1000 TPD are required to implement and identify one or more Level 1 Control Strategy listed in Table 1 for the tipping floor.

Identify the chosen Control Strategy. If the chosen Control Strategy involves construction that requires submittal of permit applications to the City, County, Local Enforcement Agency (LEA), or California Integrated Waste Management Board (CIWMB), please submit a copy of the application with the OMP.

Table 1 – Level 1 Control Strategies for Transfer Stations and Material Recovery Facilities with Permitted Throughput Greater than 250 TPD and Less than or Equal to 1,000 Tons Per Day

Odor Generating Source	Control Strategy
Tipping Floor	1.1 Operation of a handheld or overhead misting system ^{**} ; or
	1.2 Wind barriers surrounding two sides of tipping area, including the side most directly downwind of the prevailing wind* at the facility, provided solid waste is not stored more than 100 feet from the barrier; or
	1.3 Partial enclosure, consisting of a permanent roof structure covering the tipping floor and one or more walls that act as a wind barrier; or
	1.4 Full enclosure, consisting of a permanent roof structure covering the tipping floor and four walls. Openings for ventilation and access shall not exceed 10% of the sum of the area of the walls and the horizontal projection of the roof for a full enclosure; or
	1.5 Other equivalent odor control method approved by the Executive Officer
<p>[*]The prevailing wind is the direction the wind originates from</p> <p>^{**}Odor maskants or odor neutralizers are any non-toxic odor maskant or odor neutralizer that meets all applicable local, state and federal requirements.</p>	

2. Facilities with Permitted Throughput >1000 TPD

Facilities with permitted throughput greater than 1000 TPD are required to implement and identify one or more Level 2 Control Strategies listed in Table 2 for each of the following areas:

- a. tipping floor
- b. transfer tunnel
- c. material recovery facility.

Identify the chosen Control Strategy. If the chosen Control Strategy involves construction that requires submittal of permit applications to the City, County, Local Enforcement Agency (LEA), or California Integrated Waste Management Board (CIWMB), please submit a copy of the application with the OMP.

Table 2 – Level 2 Control Strategies for Transfer Stations and Material Recovery Facilities with Throughputs of MSW Greater than 1,000 Tons Per Day

Odor Generating Source	Control Strategy
Tipping Floor	2.1 Partial enclosure, consisting of a permanent roof structure covering the tipping floor and two or more walls that act as a wind barrier, in combination with a handheld or overhead misting system**; or
	2.2 Full enclosure, consisting of a permanent roof structure covering the tipping floor and four walls. Openings for ventilation and access shall not exceed 2% of the sum of the area of the walls and the horizontal projection of the roof for a full enclosure, in combination with a handheld or overhead misting system**; or
	2.3 Other equivalent odor control method approved by the Executive Officer
Transfer Tunnel⁺	3.1 Placement of physical barriers, such as plastic flaps, at the entrance or exit to the transfer tunnel, whichever is more directly downwind of the prevailing wind* at the facility; or
	3.2 Maximum drop height from the tipping floor into transfer trucks of three feet or less, above the lip of the transfer truck; or
	3.3 Operation of a misting system** at the entrance or exit to the transfer tunnel, whichever is more directly downwind of the prevailing wind* at the facility; or
	3.4 Other equivalent odor control method approved by the Executive Officer

Material Recovery Facility	4.1 Partial enclosure, consisting of a permanent roof structure covering the material receiving area and two or more walls that act as a wind barrier; or
	4.2 Full enclosure, consisting of a permanent roof structure covering the tipping floor and four walls. Openings for ventilation and access shall not exceed 10% of the sum of the area of the walls and the horizontal projection of the roof for a full enclosure; or
	4.3 Other equivalent odor control method approved by the Executive Officer
*The prevailing wind is the direction the wind originates from.	
**Odor maskants or odor neutralizers are any non-toxic odor maskant or odor neutralizer that meets all applicable local, state and federal requirements.	
*Control options are applicable only to facilities that top-load open-top trucks	